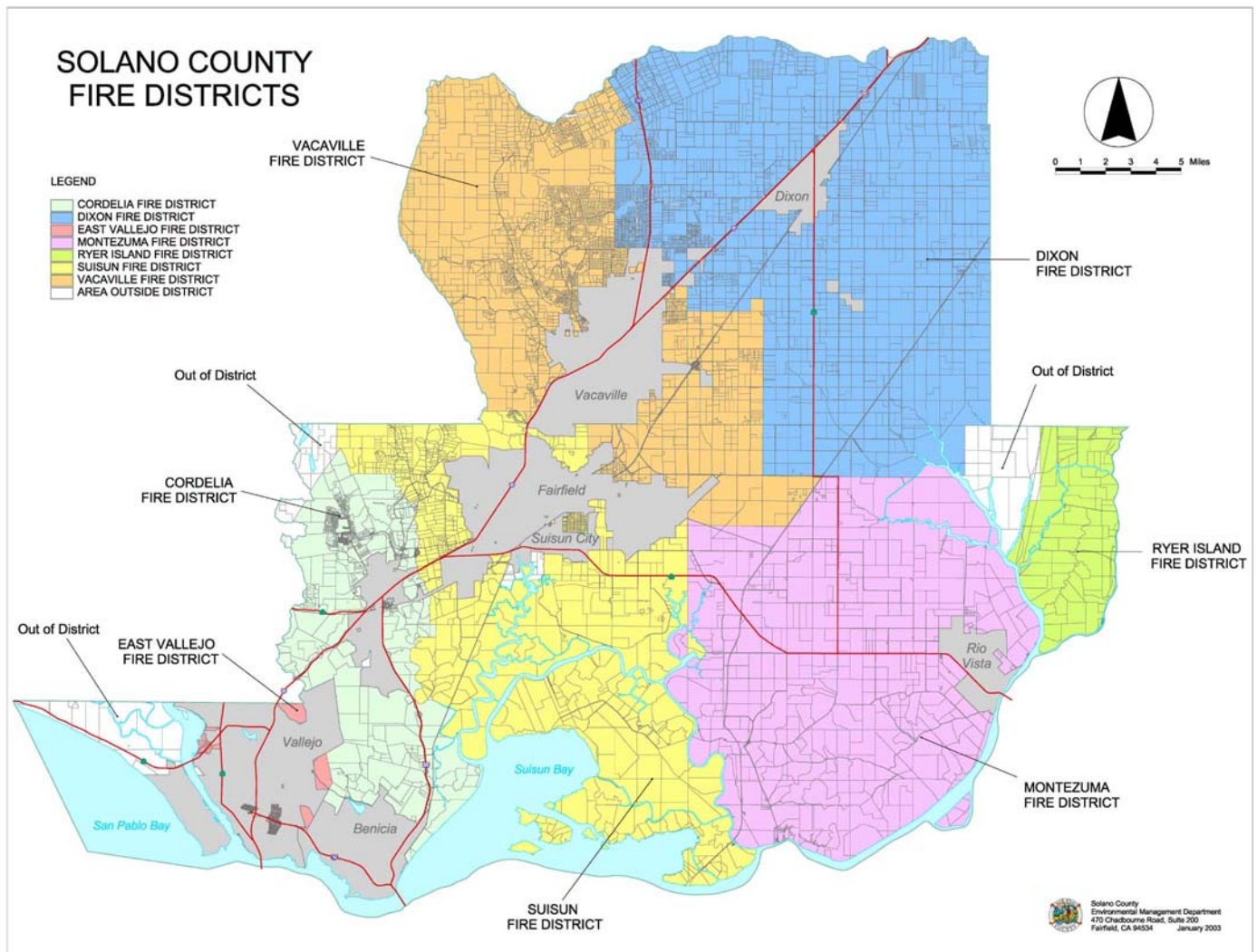


SOLANO COUNTY GRAND JURY



Solano County Emergency Services A Patchwork of Protection



2004-2005 Grand Jury Report
Issued: June 7, 2005

SOLANO COUNTY EMERGENCY SERVICES

A Patchwork of Protection

2004-2005 Solano County Grand Jury

I. Reason for Investigation

The Grand Jury received a letter faulting the organization and efficiency of the County rural fire service. Investigation led to an expanded survey of State and County-wide emergency services.

II. Procedure

- Screened the California Office of Emergency Services (OES) website, (www.oes.ca.gov/Operational/OESHome.nsf) for background information on the Governor's Office of Emergency Services
- Examined California Government Codes establishing the Standardized Emergency Management System (SEMS)
- Examined by website the California codes included in the California Emergency Services Act of 1970
- Read the Solano County Office of Emergency Services Accomplishments for Fiscal Year 2002-2003
- Examined the County of Solano Fire and Rescue Operational Area Mutual Aid Agreement of 1995
- Consulted the Solano County 2002-2003 Grand Jury Report
- Read the Solano County Multi-Agency Disaster Drill Operation Courage Exercise Operational Plan November 13, 2003, with After Action Report
- Read the Post Incident Analysis of the Cement Hill/Peabody Road Fire. (Date of event: September 4, 2004)
- Read the Summary Report of the Peabody/Cement Hill Fire Burn Over
- Read the North Bay Regional Bioterrorism Drill After Action Report dated June 23, 2004
- Examined the County of Solano, California, Interoperability Needs Assessment Final Report of June 2003 by RCC Consultants, Inc.
- Read the Marin County Grand Jury report of 2001 on the Marin Emergency Radio Authority
- Read a Solano County Office of Emergency Services letter to the Grand Jury dated March 28, 2005
- Read the Solano Local Agency Formation Commission (LAFCO) July 12, 2004: Requests for Proposals for a municipal service review of seven fire protection districts
- Interviewed seven Solano County senior fire department/fire district officers
- Interviewed an official of the California Office of Emergency Services
- Interviewed senior officials of the Solano County Office of Emergency Services
- Interviewed a Solano County supervisor
- Interviewed a senior official of the Solano LAFCO
- Toured emergency services control and communication centers at the California State Emergency Services Coastal Region headquarters in Oakland and the corresponding Solano County facility in Fairfield
- Screened Solano and Contra Costa newspapers for investigative leads

III. Background

In 1993 the State of California created a standardized emergency management system (SEMS) for use by all emergency response agencies. By 1996, State agencies were required to be using SEMS in coordinating with other jurisdictions in disaster operations. Local agencies were required to employ SEMS if they wished to qualify for disaster related reimbursement. Documentation in the areas of planning, training, exercises and performance was required.

The Governor's OES is tasked to execute SEMS. OES coordinates and assists State agency response to local governments in event of major disaster. During major emergencies, OES may call upon all State agencies to provide support to affected cities and counties. OES maintains the State Emergency Operations Plan. Through its regional offices, it is charged with furnishing training and exercise support to California counties. However senior officials admitted to the Grand Jury that OES has recently undergone a major reduction in manpower and can no longer play a leading role in operational planning and training. Moreover, the OES does not require feedback from even major training conducted at county level, not even when OES funding has supplied the financing. Asked how many fire service trainers could be sent to Solano if requested, an OES official admitted there is only one fire expert available for 16 coastal counties. Only one expert police trainer covers the same territory.

The Solano OES is charged with managing major emergency and disaster response in the County. These could include: floods, earthquakes, major fires, storms, radiological or hazardous materials incidents, mass casualty disasters and others. It operates the Solano County Emergency Operations Center (EOC). The Solano OES is also charged with conducting and participating in tabletop, functional, EOC and joint field disaster exercises in cooperation with all city and County agencies which choose to participate.

The Solano OES staff consists of three professionals. In addition, volunteers perform various services. OES is the County agency best positioned to drive interdisciplinary training between police, fire, medical, Hazardous Materials (HAZMAT), and related emergency individuals within Solano County. Toward that end, the Solano OES staff "preaches interdisciplinary training," but its authority to actually draw together departments having more immediate priorities is weak-to-nonexistent. Nor do other advocates for combined training have more authority. One mid-level interviewee, stymied at organizing joint training, characterized his only tool as "salesmanship." Another styled his method as "trying to encourage an outcome." A County official saw himself as "an ambassador for joint training." A major roadblock hindering out-of-department extra hours training is the matter of overtime pay which local departments would be obliged to grant if they detail personnel to support county training.

The County OES has sponsored two major but voluntary interdisciplinary exercises. Planning for a third is underway for June 2005 at Travis Air Force Base. There is hope that all or most emergency response agencies in Solano County will participate. But no such commitment is required and only a few have volunteered thus far. There have also been table top exercises of varying complexity in the County, but they were rarely interdisciplinary (i.e., They did not include a combination of fire, police and other agencies).

A major challenge for the Solano County OES is to obtain professional help in training its EOC staff. No such voluntary professional talent is known locally. California OES, which is formally charged with providing such multi-disciplinary help, is now too understaffed to do so. Experienced and highly qualified veteran disaster consultants are available but they "demand \$1,000 a day."

Mutual Aid agreements are the lynchpin which hold together the SEMS coordinated response system. A Solano County Sheriff/OES letter (undated, no subject) dealing with law enforcement but characteristic of all emergency actions states "All Law Enforcement mutual aid in California is strictly

voluntary...No agency is mandated to participate in any given response...unless a written agreement with adjacent agencies are [sic] established.” The County Fire and Rescue Operational Area Mutual Aid Agreement of 1996 is a good example of one such written agreement that has been established. It pledges detailed support in such matters as automatic aid, dispatching, immediate need, incident commander, jurisdictional responsibilities and related matters. Its authority derives from the voluntary signatures of all fire chiefs and the elected supervisor of each. (NOTE: All county fire agencies are signatories.)

This existing voluntary mutual aid system delivers effective day-to-day service. But in complex situations such as the Cement Hill fire, it can fail. On September 4, 2004, a major fire emergency occurred at Cement Hill between the cities of Fairfield and Vacaville. Six fire fighting agencies including over 50 fire fighting units plus aircraft were drawn in. The fire was successfully controlled. Apart from smoke inhalation, no fire fighters were injured. No structures were lost. But there were significant failures in command and control. There was inadequate command transition from what started as a small grass fire but became a major multi-alarm multi-agency incident. An incident command system (ICS) was not established for far too long. Consequently, the positions of operations section chief, plans section chief, safety officer and communications leader were left vacant. There was no communication plan for the incident and serious failures occurred due to antiquated radio equipment and insufficient channels. Use of line-of-sight radio equipment blocked out some operational areas beyond hill masses but conversely caused problems for California Department of Forestry aircraft aloft whose communications were jammed by extraneous radio traffic from as far as 50 miles away. The After Action Report listed a number of other problems, among which were (1) a lack of trained staff personnel for the County mobile command vehicle (MC-1) and, (2) risks imposed on firefighters which would have been avoided if standard safety procedures had been followed.

Drills have revealed similar weaknesses. In 2003, the Solano OES sponsored a multi-agency disaster field exercise called “Operation Courage.” Its purpose was to test and improve the operational readiness system needed to respond to a terrorist incident. The After Action Report graded the results of 58 objectives. Drill objectives so rated included the EOC, communication, law enforcement/SWAT, mobile field force and fire. Of these combined objectives, one (safety) was judged “achieved.” Twenty-four were “partially achieved” and nine were “not achieved.” Twenty-four were either not rated or received narrative summaries. Descriptive comments elsewhere in the report included this statement: “Law enforcement should communicate more with on scene fire personnel,” a comment stemming from police failure to inform firefighters of a sniper in the area. “Critical information should have been captured and relayed more efficiently and effectively to other on-scene personnel and dispatchers,” read another, pointing to coordination failures. “Law enforcement and fire command staff should meet face-to-face to establish an ICS and coordinate efforts” read another. One comment referred simply to the “absence of a unified command.”

The North Bay Regional Bioterrorism Drill involving Marin, Solano and Sonoma counties took place on June 23, 2004. Funding was by the Department of Health Services. The Drill was preceded by table top exercises which ramped up participants for this major event aimed at testing emergency management and staff actions and proposed solutions.

The report described the Solano EOC facility as a “non-dedicated alternate use facility...which has most of the weaknesses and problems inherent to these types of facilities.” The Solano Emergency Coordinator was quoted as pointing out “that 6 to 8 hours would have been required to bring the EOC into an operational status.” (NOTE: The current Solano EOC will soon have moved into a dedicated facility with a more satisfactory layout.)

The After Action Report states that, “Unfortunately the Participant Critique Sheets for Solano OpArea were lost. Therefore, we are unable to complete Part II.” (NOTE: Part II was a detailed abstract of suggested corrective procedures.) How and by whom the sheets were lost is not stated. As a result of the loss, though, corrective procedures recommended for Solano are less specific than those suggested for Marin and Sonoma.

From the narrative summary it is clear that EOC procedures were weak. Noise levels were high. A participant described the EOC environment as follows: “The EOC progressed from organizational bedlam to organized chaos.” Recommendations from report subsections stressed the need to: “Conduct EOC orientation training sessions,” “Conduct additional EOC exercises” and “Establish policies to address noise levels.” The Solano Operational Area corrective actions wrap-up devoted nearly half of its 13 recommendations to general EOC procedural weaknesses.

Within the County-wide fire system there is a fault line between the seven city fire departments and the seven fire protection districts. Differences may include:

- Paid professionals vs. volunteer fire personnel
- Rapid vs. slower response
- Fully staffed vs. piecemeal response
- Solid vs. weak fiscal support
- Modern vs. older equipment
- Grassland vs. urban challenge
- Continual vs. intermittent training
- Union pay vs. minimal volunteer remuneration
- Municipal government vs. district elected governing board.

There exists a “we-they attitude” between some fire districts and the city fire departments. “They act like knights of the round table” was one reason given for ceasing to attend county-wide fire meetings. The words “ego” and “territorial” surfaced during a half dozen interviews. Nevertheless most interviewees agreed, some with reluctance and after citing many impediments, that a unified County-wide fire suppression district would be in the best interests of all. An upcoming Solano County LAFCO municipal service review of Solano’s fire suppression districts is expected to address these issues. (NOTE: Counties which have consolidated their fire suppression districts include Alameda, Contra Costa, Nevada, Placer, Sacramento, San Bernardino, San Mateo and Stanislaus.)

Solano County emergency response agencies are crippled by a dangerously weak communications system linking them to each other. A recently completed interoperability needs assessment states that, “The Solano County radio infrastructure has evolved independently over the years into four incompatible types of radio systems.” Fire officials County wide confirmed that they must carry four different radios with them to communicate with all stations. Communications between individual units on the fire line are hit-or-miss. Quotes from Cement Hill participants included these: “The radio system was inundated...” “Non compatible and inappropriate radio equipment presented the greatest challenge of the event” and “The early hours were a confusing nightmare.”

The professionally-written needs assessment offered three progressively more capable solutions predicted to cost \$2.1 million, \$39.2 million, and \$52.2 million. The County OES is in the process of developing a request for proposals in the \$2 million range. Most of the necessary funds are on hand already, mostly from grant money. (NOTE: Faced with a similar problem, Marin County established the Marin Emergency Radio Authority – a joint powers authority – and signed a contract for a \$21 million upgrade.)

The emergency dispatch system is unnecessarily complicated. Fire 9-11 calls are answered in seven different centers. In a Cement Hill-class challenge, fire dispatch became confused as reinforcements from different departments were called up through multiple systems and fed piecemeal into what should be a unified effort. To quote the Operation Courage After Action Report, “Dispatch centers will become immediately overwhelmed during incidents such as this.” (NOTE: Nearby counties which have consolidated their dispatch centers include: Monterey, San Francisco, Santa Cruz, Shasta, Stanislaus and Yolo.)

The governing OES principle holding that all inter-departmental mutual aid is strictly voluntary has produced a system wherein this Grand Jury was unable to identify a single actual or training incident above the local level which was directed by a unified chief. No leader, elected, appointed, or otherwise acclaimed, is known to have faced down a staff of deadlocked colleagues and successfully ordered combined local agencies in Solano to “execute this plan now.”

IV Findings and Recommendations

Finding # 1 – Last year’s bioterrorism exercise results confirm that the Solano County EOC staff is still unready to direct counter actions in event of a major disaster.

Recommendation # 1 – The EOC staff should reinforce training using a structured progression of exercises. These could begin by drilling small single functional teams on table top exercises. They could progress to greater complexity employing combinations of teams which have learned the basics. Drills should occur in the new EOC. The Emergency Operations Plan, which the Bioterrorism Drill After Action Report rated “an excellently crafted document” should be a major training reference. Other training sources should be section objectives and position checklists. Seek out opportunities to participate in future regional drills similar in scope to the Bioterrorism -scenario.

Finding # 2 – Emergency radio communications in Solano County are seriously deficient. Of three corrective options offered by a consultant, this County selected the least expensive. Note that the 2002-2003 Grand Jury recommended the formation of a joint power authority to oversee, coordinate and implement the emergency communication needs of this County.

Recommendation # 2a – This Grand Jury endorses the recommendations of the 2002-2003 Grand Jury.

Recommendation #2b – The County should verify that the least expensive option for radio upgrades, which is currently favored, will in fact solve Solano’s problems.

Finding # 3 – County wide emergency response services must train now to perform as they would in a 9/11 catastrophe.

Recommendation # 3 – Local elected and appointed officials should require that their emergency services departments join in developing and carrying out combined training at the County-wide level. These leaders should remain abreast of lessons learned and unresolved problems.

Finding # 4 –Solano County fire agencies need continuous practice on implementing incident command systems under stressful conditions.

Recommendation # 4 – Fire agencies should continue to conduct multi-agency table top exercises using rotating teams of leaders. These sessions should be based on after action reports and incident debriefings which identify failures.

Finding # 5 – Solano County fire suppression districts are fragmented in service, cooperation and efficiency. But many sensibilities and old loyalties stand in the way of simply ordaining a more efficient and unified district.

Recommendation # 5 – Solano LAFCO should seek ways, perhaps step-by-step, and perhaps from the bottom up, of achieving unified and effective fire service for all the County’s citizens. The Grand Jury notes that the LAFCO service review for Solano’s seven fire protection districts is under way.

Finding # 6 – The dispatch system in Solano County is antiquated, inefficient and could pose a risk to responders and others in complex multi agency situations.

Recommendation # 6 – The dispatch system should be consolidated, as was previously recommended by the 2002-2003 Grand Jury.

V. Comments

The Grand Jury’s formal investigation only considered the State Emergency Management System, which is exclusively a voluntary association of agencies. But incidental reading of related State government codes in the 8600 series points to a more disciplined chain of command which could exist under a “state of war emergency” or a “state of emergency.”

VI. Affected Agencies

- Solano County Board of Supervisors
- Solano County Administrator
- Solano County Sheriff/Coroner’s Office
- Solano County Emergency Services Manager
- Solano Local Agency Formation Commission
- City of Benicia
- City of Benicia City Manager
- City of Benicia City Council
- City of Benicia Police Chief
- City of Benicia Fire Chief
- City of Dixon
- City of Dixon City Manager
- City of Dixon City Council
- City of Dixon Police Chief
- City of Dixon Fire Chief
- City of Fairfield
- City of Fairfield City Manager
- City of Fairfield City Council
- City of Fairfield Police Chief
- City of Fairfield Fire Chief
- City of Suisun City
- City of Suisun City Manager
- City of Suisun City Council
- City of Suisun Police Chief
- City of Suisun Fire Chief

- City of Rio Vista
- City of Rio Vista City Manager
- City of Rio Vista City Council
- City of Rio Vista Police Chief
- City of Rio Vista Fire Chief
- City of Vacaville
- City of Vacaville City Manager
- City of Vacaville City Council
- City of Vacaville Police Chief
- City of Vacaville Fire Chief
- City of Vallejo
- City of Vallejo City Manager
- City of Vallejo City Council
- City of Vallejo Police Chief
- City of Vallejo Fire Chief
- Cordelia Fire Protection District
- Fire Chief, Cordelia Fire Protection District
- Dixon Fire Protection District
- Fire Chief, Dixon Fire Protection District
- East Vallejo Fire Protection District
- Montezuma Fire Protection District
- Fire Chief, Montezuma Fire Protection District
- Ryer Island Fire Protection District
- Suisun Fire Protection District
- Fire Chief, Suisun Fire Protection District
- Vacaville Fire Protection District
- Fire Chief, Vacaville Fire Protection District

Courtesy Copies

- State Senator, 2nd District
- State Senator, 4th District
- State Assembly, 7th District
- State Assembly, 8th District
- California Office of Emergency Services